- Holbrook, C. F. 1939. Calendar of the Letters of Charles Robert Darwin to Asa Gray. The Historical Records Survey, Boston, Massachusetts.
- JOHNSTON, I. M. 1952. Studies in the Boraginaceae, XXIII, A survey of the genus Lithospermum. Journ. Arnold Arb. 33:299-363.
- KNUTH, P. 1898. Handbuch der Blütenbiologie. vol. 1. Leipzig.
- —. 1899. Ibid. vol. 2 (2).
- ————. 1906. Handbook of Flower Pollination (trans. by J. R. A. Davis), vol. 1. Oxford.
- —. 1909. Ibid., vol. 3.
- Kulczyński, S. 1932. Die altidiluvialen Dryasfloren der Gegend von Przemysl. Acta Soc. Bot. Polon. 9:236-299.
- Lewis, D. 1954. Comparative incompatibility in angiosperms and fungi. Adv. in Genetics, 6:235-285.
- MACBRIDE, J. F. 1917. A revision of the North American species of Amsinckia. Contr. Gray Herb. N.S. 49:1-16.
- Macleod, J. 1887. Untersuchungen über die Befruchtung der Blumen. Bot. Centralbl. 29:150-154.
- MÜLLER, F. 1869. Ueber eine dimorphe Faramea. Bot. Zeit., 27:606-611.
- RAY, P. M. AND H. F. CHISAKI. 1957. Studies on Amsinckia. I. A synopsis of the genus, with a study of heterostyly in it. Amer. Jour. Bot. 44: 529-536.
- SMITH, E. F. 1879. Trimorphism in Lithospermum canescens, Lehm. Bot. Gaz. 4:168-169.
- Suksdorf, W. N. 1931. Untersuchungen in der Gattung Amsinckia. Werdenda 1:47-113.
- Torrey, J. 1856. Report on the botany of the (Whipple) expedition. Rept. Route near 35th Parallel 4:124.

## A NEW SPECIES OF PANICUM FROM NEW JERSEY

## JASON R. SWALLEN

A specimen of *Panicum* was received recently for identification from Bayard Long of the Academy of Natural Sciences of Philadelphia, which has proven to be new. It was collected by Frank Hirst, an active amateur botanist in southern New Jersey, who recognized it as an unusual plant, and in whose honor the species is named. "It occurs dominantly in a small woodland pond in the pine barrens—growing in the water, much as Panicum spretum often does. This is a most interesting pond, the Panicum being

associated with Lobelia boykinii, Paspalum dissectum, Coreopsis rosea, etc."

## Panicum hirstii Swallen, sp. nov.

Culmi 55-80 cm. alti, ramosi, glabri; ligula brevis, ciliata; laminae acuminatae, adscendentes, usque ad 11 cm. longae, 3-5.5 mm. latae, glabrae; panicula angustissima, usque ad 9 cm. longa; spiculae 1.8-2.1 mm. longae, glabrae; gluma prima obtusa enervis.

Culms 55-80 cm. tall, erect or ascending, glabrous; sheaths mostly shorter than the internodes, glabrous or sparsely pilose on the margins near the summit, the uppermost usually elongate; ligule a dense line of hairs, 0.5 mm. long; blades stiffly erect or narrowly ascending, 4.5-11 cm. long, 3-5.5 mm. wide, flat, acuminate, glabrous, often tinged with purple; panicles 4.5-9 cm. long, about 5 mm. wide, the branches as much as 2.5 cm. long, appressed, smooth or scaberulous; spikelets 1.8-2.1 mm. long, glabrous, the pedicels appressed, usually a little shorter than the spikelets; first glume broadly obtuse, nerveless, 0.5-0.8 mm. long; second glume and sterile lemma with hyaline margins, the lemma cucculate, subacute, as long as the fruit, the glume broadly obtuse, a little shorter than the fruit; fruit subacute, obscurely roughened, pale or yellowish. Autumnal phase sparingly branching from most of the nodes, the leaves and panicles not much reduced.

Type in the U.S. National Herbarium No. 2,306,491, collected in Leipzig Ave. Pond, Germania, Atlantic Co., New Jersey, June 7, 1959, by Frank Hirst (No. 47).

Additional material examined: NEW JERSEY: In water of small woodland pond, pine barrens, in Galloway Township, southeast of Egg Harbor City (this is the same locality as the one where the type was collected, fide Bayard Long), August 11, 1959, Bayard Long 85320. GEORGIA: Margin of pine-barren pond, Sumter County, August 23, 1900, Roland M. Harper 458; Cypress swamp, 1 mile north of Leary, Calhoun County, May 31, 1947, Robert H. Thorne 4313.

Harper 458 was doubtfully referred to Panicum roanokense Ashe by Hitchcock and Chase in their revision of Panicum (Contr. U. S. Nat. Herb.15: 197. 1910). P. hirstii is readily distinguished from P. roanokense, however, by the very narrow panicles with relatively short-pedicelled spikelets, the shorter second glume, and the sparingly branching culms, the autumnal blades and panicles scarcely reduced. — DEPARTMENT OF BOTANY, U. S. NATIONAL MUSEUM, SMITHSONIAN INSTITUTION, WASHINGTON, D. C.